NAVFAC

ALTERNATIVE RESTORATION TECHNOLOGY TEAM

Leadership in Innovative Environmental Cleanup Technology

ARTT is a NAVFAC-chartered workgroup established to promote and implement the use of cost effective, innovative technologies, and methods in the Navy Installation Restoration (IR) program.

http://erb.nfesc.navy.mil/support/work_grp/artt/main.html

ARTT's OBJECTIVES

- Identify barriers that inhibit implementation of innovative technologies and methods.
- Recommend process change to management to eliminate or minimize barriers.
- Propose policies and recommending procedures and guidance for implementing innovative technologies and methods.
- Develop and recommend initiatives and strategies that will support use of innovative technologies and methods.
- Identify potential sites and innovative technologies for demonstration projects.

ARTT members are remedial technical managers, remedial project managers (RPMs) and installation restoration representatives from the Chief of Naval Operations, Commandant of the Marine Corps, Naval Facilities Engineering Command, Engineering Field Divisions and Activities, and Naval Facilities Engineering Service Center.

PROGRESS AND ACCOMPLISHMENTS

In 1999, ARTT continued to focus on promoting practical solutions for critical technology implementation issues. In the process, ARTT highlighted the importance of balancing program execution with quality implementation. Solutions for identified barriers to implementing innovative technologies included:

Resources

- *Remedial Information Management System (RIMS2000)*

ARTT evaluated and recommended a corporate subscription of the Enviroglobe.com's system. This interactive web-based database provides a comprehensive listing and independent evaluation of more than 800 remediation technologies. ARTT submitted a proposal for a corporate subscription to management with a decision expected in the Spring 2000.

- *ARTT's Web Page*

[http://erb.nfesc.navy.mil/support/work_grp/artt/main.html]

The web page provides latest workgroup activities, information on remedial technologies, lessons learned, and other current efforts at the EFAs/EFDs.

Publications

ARTT members provide articles in the RPM Newsletter and other environmental publications. These articles provide up-to-date technology information or lesson learned. ARTT published three articles in the past year promoting new and exciting discoveries:

- "Effective Source Reduction with Chemical Oxidation" by Mike Maughon and Cliff Casey, featured chemical oxidation's effectiveness with chlorinated hydrocarbons.
- "New Sampling Method Cuts Time and Cost at NSA Mid-South" introduced an innovative groundwater sampling method using diffusion samplers.
- "RIMS2000 is Here" by Richard Mach detailed an exciting, no-cost opportunity to use the comprehensive technology database from EnviroGlobe.com.

Field Projects

Y0817 Technology Demonstration and Evaluation Program is a NAVFAC-sponsored program identifies future technology needs, and funds the demonstration and evaluation of these technologies.

ARTT members actively participate in the Y0817, helping to establish a process that matches "Dem-Val" funds with practical technology. The process, a collaborative effort among NAVFAC, EFDs, EFAs, and NFESC, demonstrates that Dem-Val investment in Navy environmental cleanup have a greater return when linked directly to practical field applications.

During the past year, ARTT completed a direct comparison among 15 technologies treating volatile organic compounds off-gas. The result of this project is a web-based database that provides RPMs with comparative information on the different VOCs off-gas treatment systems. For more information on this project, visit our website at:
[http://erb.nfesc.navy.mil/erb_a/restoration/technologies/invest/sel_tools/voc_offgas.htm]

Current Y0817 projects with ARTT involvement include: Development of the Marine Sediment Toxicity Data for Ordnance Compounds at EFA Northwest, In-Situ Redox Manipulation and In-situ Oxidation using Fenton's Reagent at Southern Division, and Enhanced Natural Attenuation in Commingled Plumes at EFA West.

In October 1999, ARTT and Y0817 Board selected two additional projects for CY2000:

- Demonstration of Toxicity Identification Evaluation (TIE) procedures to Identify Risk Causing CoCs in Contaminated Sediments at Navy Aquatic Sites. Northern Division
- Guidelines and Procedures for Determining Restoration Timeframes Associated with Monitored Natural Attenuation at Naval Facilities and Its Application at Two Naval Installations. Southern Division.

ARTT in 2000

ARTT continues to re-examine its function and usefulness in the ever-changing environment of the Navy/ Marine Corps IR Program, ARTT is committed to be proactive in the promotion, implementation, and demonstration of innovative technologies.

For CY00, ARTT projects include:

- Developing a technical protocol for the use of diffusion samplers for LTM with the USGS, AFCEE, and ITRC.
- Preparing a cost and performance report on Praxis Pneulog; an innovative and proprietary methodology that optimized SVE/AS system to reduce installation and operational costs.
- Providing status and performance report of in-situ chemical oxidation at various IR sites.
- Updating the 1998 ARTT's Monitored Natural Attenuation protocol.

Future newsletter articles will feature: lactate injection; re-circulating wells lessons learned; zero valence iron treatment cells; and a discussion of Corrective Action Management Unit at Camp Pendleton.

ARTT, designated as an integral part of Chief of Naval Operations' SMART Programs and Technologies, continues to promote and balance human and ecological risk with cost-effective and innovative cleanup technologies by:

Improving Internal/External Technical Support

- ARTT members share regional quality improvement information and disseminate information within their offices.
- ARTT members participate in various Navy/Marine Corps workgroups and Cleanup Review Tiger Teams to provide technical support and promote innovative technology implementation.

Enhancing Technologies Initiatives and Technology Transfer Potential

- Reviewed NFESC's Broad Agency Announcement proposals for innovative technologies.
- Served as IR focal point at the respective EFDs/ EFAs to facilitate RPM access to innovative technologies available through the BAA process.
- Served as informal point-of contacts for technical data calls (e.g., for sites to demonstrate new/ innovative technologies).

Strengthening RPM Training Support

ARTT continues to work closely with Civil Engineer Corps Officers School to update the IR curriculum and serves as content reviewer in the development of new curriculum and training material as it relates to innovative technologies.

Points of Contact

If you are interested in participating in ARTT, contact:

EFA Chesapeake
(202) 685-3185
(202) 685-3281

EFA Northwest
(360) 396-0015

EFA West
(650) 244-2565
(650) 244-2539

LANTDIV
(757) 322-4780

NORTHDIV
(610) 595-0567 x146
(610) 595-0567 x160

PACDIV
(808) 474-4515
(808) 474-4513

SOUTHDIV
(843) 820-7422
(843) 820-5561

SOUTHWESTDIV
(619) 532-2546
(619) 556-9934

CNO
(703) 602-5329

CMC
(703) 695-8302 x3329

IR MANAGERS' LINK
(843) 820-5944

NAVFAC
(202) 685-9317

NFESC
(805) 982-1600
(805) 982-5478

or visit our website
http://erb.nfesc.navy.mil/support/work_grp/artt/main.html

February 2000

Printed on recycled paper